

REMARKS

In the final Office Action, the Examiner rejected claims 1-18, 20-23, and 27-29 under 35 U.S.C. § 102(e) as anticipated by Passman et al. (U.S. Patent No. 6,493,759); and rejected claims 24 and 25 under 35 U.S.C. § 103(a) as unpatentable over Passman et al. in view of Fischer (U.S. Patent No. 5,371,734). The Examiner objected to claims 19 and 30 as dependent upon a rejected base claim, but would be allowable if rewritten in independent form to include the features of the base claim and any intervening claims.

By this Amendment, Applicants propose canceling claim 30 without prejudice or disclaimer, amending claims 17 and 29 to improve form, and adding new claim 31. Applicants appreciate the Examiner's identification of allowable subject matter, but respectfully traverse the Examiner's rejections under 35 U.S.C. §§ 102 and 103. Claims 1-25, 27-29, and 31 will be pending after entry of this amendment.

In paragraph 3 of the final Office Action, the Examiner rejected claims 1-18, 20-23, and 27-29 under 35 U.S.C. § 102(e) as allegedly anticipated by Passman et al. Initially, independent claim 29 has been amended to incorporate the allowable subject matter of claim 30. Claim 29, therefore, should be in condition for immediate allowance by the Examiner. Applicants respectfully traverse the rejection with regard to the remaining claims.

A proper rejection under 35 U.S.C. § 102 requires that a single reference teach every aspect of the claimed invention either expressly or impliedly. Any feature not directly taught must be inherently present. In other words, the identical invention must be shown in as complete detail as contained in the claim. See M.P.E.P. § 2131. Passman et al. does not disclose the combination of features recited in claims 1-18, 20-23, 27, and 28.

Independent claim 1 is directed to a method for integrating a wireless terminal into a wireless network. The method comprises determining whether the wireless terminal contains at

least one functioning cluster transceiver, attempting to affiliate the wireless terminal with a cluster head as a cluster member if the wireless terminal contains the at least one functioning cluster transceiver, and operating the wireless terminal as a cluster head if the wireless terminal does not contain the at least one functioning cluster transceiver.

Passman et al. does not disclose the combination of features recited in claim 1. For example, Passman et al. does not disclose determining whether the wireless terminal contains at one functioning cluster transceiver.

The Examiner alleged that Passman et al. discloses this feature and cited column 3, lines 43-53, of Passman et al. for support (Office Action, page 2). Applicants respectfully disagree.

At column 3, lines 43-53, Passman et al. discloses:

According to one aspect of the invention, the mobile communications station includes a memory and a processor. The memory has network information stored thereon. The processor (i) operates the mobile station as a cluster head station; (ii) resigns the mobile station from operating as a cluster head station; and (iii) maintains affiliation with a cluster head neighbor at least during a period in which the mobile station resigns from operating as a cluster head and commences operating as a cluster member of the cluster head neighbor.

In this section, Passman et al. discloses that a mobile communications station resigns as a cluster head and commences operating as a cluster member. Passman et al. describes in detail the manner in which a mobile station resigns as a cluster head and commences operating as a cluster member (col. 9, line 31 - col. 11, line 54). Nowhere does Passman et al. disclose that any determination is made as to whether the mobile station contains at one functioning cluster transceiver, as required by claim 1.

In response to similar arguments presented in a previous response, the Examiner alleged that "[b]ecause of determining the functionality as a cluster transceiver, upon the mobile terminals movement and traffic of the communication, communicating as cluster head and cluster member" (final Office Action, page 2). As far as Applicants can understand the

Examiner's allegation, Applicants respectfully submit that Passman et al. does not disclose that any determination is made as to whether a mobile station contains at one functioning cluster transceiver, as required by claim 1. The Examiner has not pointed to any section of Passman et al. that can reasonably be construed as disclosing this feature.

The Examiner also alleged that Applicants' arguments fail to comply with 37 CFR 1.111(b) because they allegedly amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the reference (final Office Action, pages 2-3). Applicants disagree. Applicants have specifically pointed out a claimed feature not disclosed by Passman et al. The Examiner continues to cite the same portion of Passman et al. without any articulate explanation of how that portion of Passman et al. is arguably equivalent to the claimed feature. Therefore, the Examiner has not established a proper case of anticipation with regard to claim 1.

Because Passman et al. does not disclose determining whether the wireless terminal contains at least one functioning cluster transceiver, Passman et al. cannot disclose attempting to affiliate the wireless terminal with a cluster head as a cluster member if it is determined that the wireless terminal contains at least one functioning cluster transceiver, as also recited in claim 1. Passman et al. discloses that a mobile station attempts to affiliate with a cluster head neighbor (col. 10, line 55 - col. 11, line 44). Passman et al. does not disclose, however, that the affiliation attempt is performed if the mobile station is determined to contain at least one functioning cluster transceiver, as required by claim 1.

Because Passman et al. does not disclose determining whether the wireless terminal contains at least one functioning cluster transceiver, Passman et al. cannot disclose operating the wireless terminal as a cluster head if it is determined that the wireless terminal does not contain at least one functioning cluster transceiver, as also recited in claim 1. Passman et al. describes

several factors that a mobile station considers in determining whether to resign as a cluster head (col. 9, line 31 - col. 11, line 54). For example, Passman et al. discloses that a mobile station considers whether it is an articulation point, whether it has any affiliated cluster members, and whether it received an acknowledgement from a best cluster head neighbor (Fig. 5, S21, S24, S28, and S31). Nowhere does Passman et al. disclose that the mobile station operates as a cluster head if the mobile station is determined not to contain at least one functioning cluster transceiver, as required by claim 1.

For at least these reasons, Applicants submit that claim 1 is not anticipated by Passman et al. Claims 2-9 depend from claim 1 and are, therefore, not anticipated by Passman et al. for at least the reasons given with regard to claim 1. Claims 2-9 are also not anticipated by Passman et al. for reasons of their own.

For example, claim 3 recites determining whether the wireless terminal contains one or more functioning backbone transceivers if the attempted affiliation is not successful and operating the wireless terminal as a cluster head if the wireless terminal contains one or more functioning backbone transceivers. Passman et al. does not disclose that a determination is made as to whether a mobile station contains one or more functioning backbone transceivers. The Examiner did not address this feature and, therefore, did not establish a proper case of anticipation with regard to claim 3.

Applicants pointed out this deficiency in the Examiner's rejection in a previous response and the Examiner continues to ignore the feature and Applicants' arguments. If the Examiner cannot specifically point out a portion of Passman et al. that allegedly corresponds to this feature of claim 3, then the Examiner should identify claim 3 as containing allowable subject matter.

For at least these additional reasons, Applicants submit that claim 3 is not anticipated by Passman et al.

Claim 4 depends from claim 3 and is, therefore, not anticipated by Passman et al. for the additional reasons given with regard to claim 3.

Independent claim 10 is directed to a method for configuring a wireless terminal within a wireless network. The method comprises operating the wireless terminal as a cluster head; determining whether the wireless terminal contains at least one functioning cluster radio; repeating said operating if the wireless terminal contains no functioning cluster radio; ascertaining whether continued operation of the wireless terminal as a cluster head is necessary if the wireless terminal contains one or more functioning cluster radios; and attempting to resign as the cluster head if the continued operation of the wireless terminal as a cluster head is not necessary.

Passman et al. does not disclose the combination of features recited in claim 10. For example, Passman et al. does not disclose determining whether the wireless terminal contains at least one functioning cluster radio, for at least reasons similar to reasons given with regard to claim 1.

Because Passman et al. does not disclose determining whether the wireless terminal contains at least one functioning cluster radio, Passman et al. cannot disclose repeating operating the wireless terminal as a cluster head if the wireless terminal contains no functioning cluster radio, or ascertaining whether continued operation of the wireless terminal as a cluster head is necessary if the wireless terminal contains one or more functioning cluster radios, as further recited in claim 10.

For at least these reasons, Applicants submit that claim 10 is not anticipated by Passman et al. Claims 11-16 depend from claim 10 and are, therefore, not anticipated by Passman et al. for at least the reasons given with regard to claim 10.

Amended independent claim 17 is directed to a wireless network. The wireless network comprises a plurality of first wireless terminals, at least one second wireless terminal, and a third wireless terminal. The first wireless terminals are configured to operate as cluster heads by communicating with at least one other cluster head over one or more backbone links. Each one of the plurality of first wireless terminals includes one or more backbone transceivers. The at least one second wireless terminal is configured to operate as a cluster member by communicating with an associated cluster head over one or more local links. Each one of the at least one second wireless terminals includes one or more cluster transceivers. At least one of the first or second wireless terminals includes both a backbone transceiver and a cluster transceiver. The third wireless terminal is configured to determine whether the third wireless terminal includes a functioning backbone transceiver and affiliate with one of the first wireless terminals when the third wireless terminal includes no functioning backbone transceiver.

Passman et al. does not disclose the combination of features recited in amended claim 17. For example, Passman et al. does not disclose a third wireless terminal that is configured to determine whether the third wireless terminal includes a functioning backbone transceiver. Passman et al. is silent with regard to this feature.

Because Passman et al. does not disclose a third wireless terminal that is configured to determine whether the third wireless terminal includes a functioning backbone transceiver, Passman et al. cannot disclose a third wireless terminal that is configured to affiliate with one of the first wireless terminals when the third wireless terminal includes no functioning backbone transceiver.

For at least these reasons, Applicants submit that claim 17 is not anticipated by Passman et al. Claims 18 and 20-23 depend from claim 17 and are, therefore, not anticipated by Passman et al. for at least the reasons given with regard to claim 17.

Independent claim 27 is directed to a wireless terminal. The wireless terminal comprises means for determining whether the wireless terminal includes at least one cluster radio, means for determining whether the wireless terminal includes at least one backbone radio when the wireless terminal includes at least one cluster radio, means for operating as a cluster head when the wireless terminal includes at least one cluster radio and at least one backbone radio, and means for operating as a cluster member when the wireless terminal includes at least one cluster radio but no backbone radio.

Passman et al. does not disclose the combination of features recited in claim 27. For example, Passman et al. does not disclose means for determining whether the wireless terminal includes at least one cluster radio. In other words, Passman et al. does not disclose that a wireless terminal makes a determination as to whether it includes at least one cluster radio. The Examiner did not address this feature and, therefore, did not establish a proper case of anticipation with regard to claim 27.

Applicants pointed out this deficiency in the Examiner's rejection in a previous response and the Examiner continues to ignore the feature and Applicants' arguments. If the Examiner cannot specifically point out a portion of Passman et al. that allegedly corresponds to this feature of claim 27, then the Examiner should identify claim 27 as containing allowable subject matter.

Because Passman et al. does not disclose means for determining whether the wireless terminal includes at least one cluster radio, Passman et al. cannot disclose means for determining whether the wireless terminal includes at least one backbone radio when it is determined that the wireless terminal includes at least one cluster radio, as further recited in claim 27. The Examiner did not address this feature and, therefore, did not establish a proper case of anticipation with regard to claim 27.

Because Passman et al. does not disclose means for determining whether the wireless terminal includes at least one cluster radio or means for determining whether the wireless terminal includes at least one backbone radio when it is determined that the wireless terminal includes at least one cluster radio, Passman et al. cannot disclose means for operating as a cluster head when it is determined that the wireless terminal includes at least one cluster radio and at least one backbone radio, or means for operating as a cluster member when it is determined that the wireless terminal includes at least one cluster radio but no backbone radio, as further recited in claim 27.

For at least these reasons, Applicants submit that claim 27 is not anticipated by Passman et al. Claim 28 depends on claim 27 and is, therefore, not anticipated by Passman et al. for at least the reasons given with regard to claim 27.

In paragraph 2 of the final Office Action (beginning at page 8), the Examiner rejected claims 24 and 25 under 35 U.S.C. § 103(a) as allegedly unpatentable over Passman et al. in view of Fischer. Applicants respectfully traverse the rejection.

As explained in Applicants' prior response, Applicants submit that Passman et al. does not qualify as prior art under 35 U.S.C. § 103(a). Accordingly, a rejection under 35 U.S.C. § 103(a) based on Passman et al. is not a proper rejection.

35 U.S.C. § 103(c) qualifies 35 U.S.C. § 103(a) and states:

(c) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Passman et al. qualifies as prior art under 35 U.S.C. § 102 only under subsection (e). The present application and the Passman et al. patent were, at the time the invention of the present application was made, owned by or subject to an obligation of assignment to BBNT Solutions

LLC. The Passman et al. patent was assigned to BBNT Solutions LLC and recorded at Reel 011082 and Frame 0583 on November 3, 2000. The present application also contains a recorded assignment from the inventors to BBNT Solutions LLC. Accordingly, the Passman et al. patent is not available to preclude patentability under 35 U.S.C. § 103(a).

Fischer does not disclose or suggest the combination of features recited in claims 24 and 25.

The Examiner alleged that "35 USC 103(c) is not applicable to disqualify a prior art to the rejection under 35 USC 102 (e)" (final Office Action, page 4). Applicants submit that this statement by the Examiner is directly contrary to U.S. patent laws, as stated in 35 U.S.C. § 103(c), which is reproduced above.

For at least these reasons, Applicants respectfully request the reconsideration and withdrawal of the rejection of claims 24 and 25 under 35 U.S.C. § 103(a) based on Passman et al. and Fischer.

New independent claim 31 recites features similar to features recited in amended claim 29. Because amended claim 29 is in condition for allowance, new claim 31 should also be in condition for immediate allowance by the Examiner.

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and allowance of pending claims 1-25, 27-29, and 31.

Applicants respectfully request that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, placing claims 1-25, 27-29, and 31 in condition for immediate allowance. Applicants submit that the entry of this Amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims.

If the Examiner believes that the application is not now in condition for allowance, Applicants respectfully request that the Examiner contact the undersigned to discuss any outstanding issues.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 18-1945 and please credit any excess fees to such deposit account.

REMARKS

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-1945, under Order No. BBNT-P01-144 from which the undersigned is authorized to draw.

Dated: March 13, 2006

Respectfully submitted,

By 

Edward J. Kelly

Registration No.: 38,936

ROPES & GRAY LLP

One International Place

Boston, Massachusetts 02110-2624

(617) 951-7000

(617) 951-7050 (Fax)

Attorneys/Agents For Applicant